



STATE OF MARYLAND

DMHM

Maryland Department of Health and Mental Hygiene
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December 10, 2010

Public Health & Emergency Preparedness Bulletin: # 2010:48 Reporting for the week ending 12/4/10 (MMWR Week #48)

CURRENT HOMELAND SECURITY THREAT LEVELS

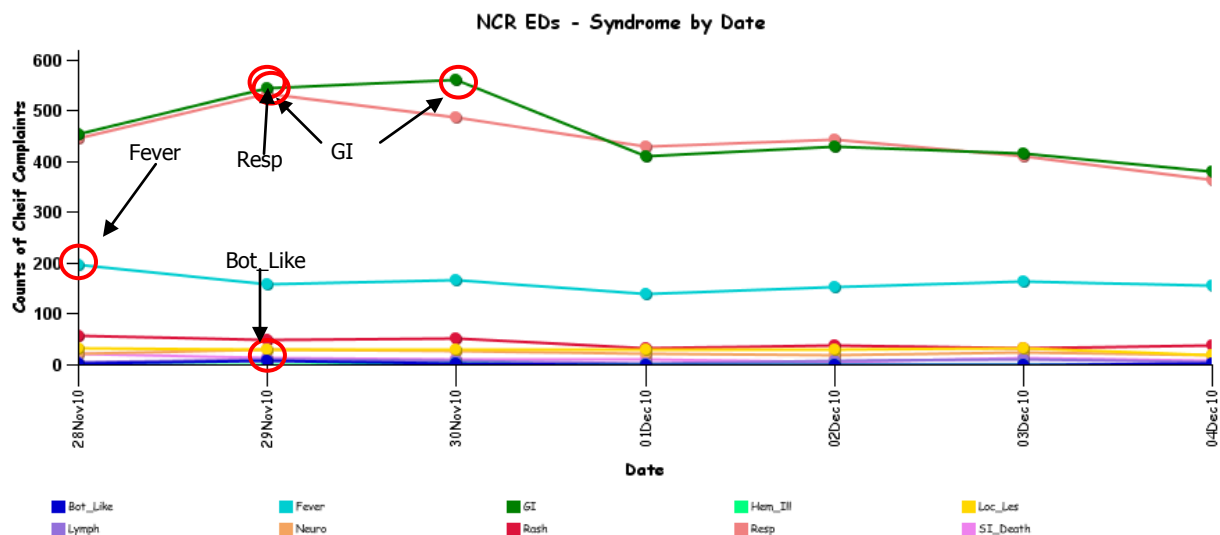
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

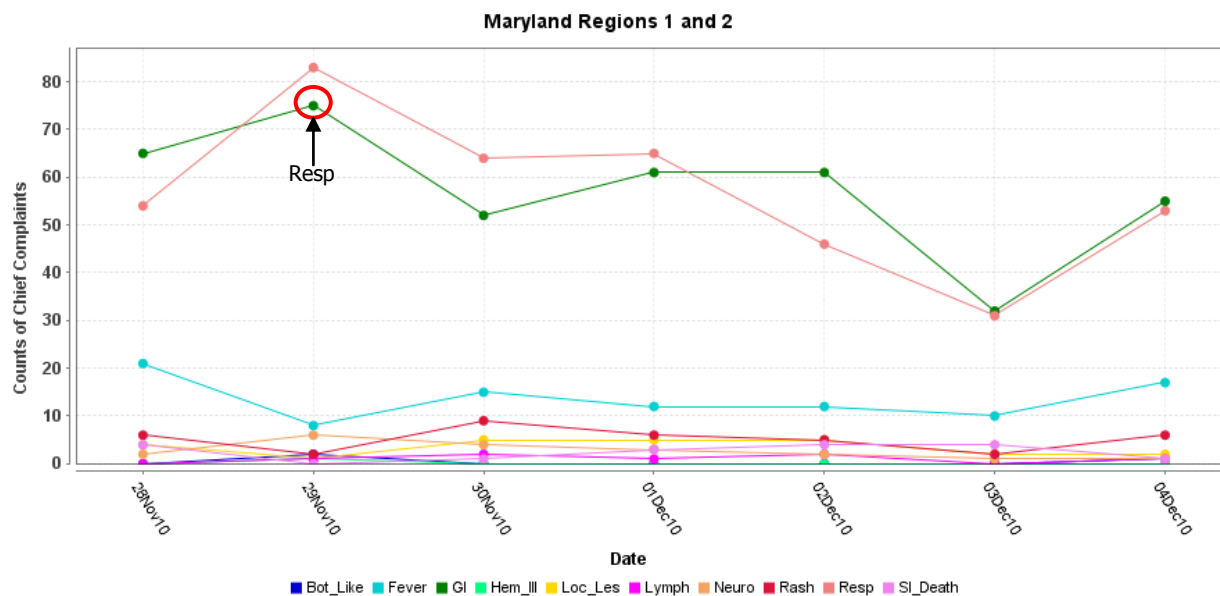
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

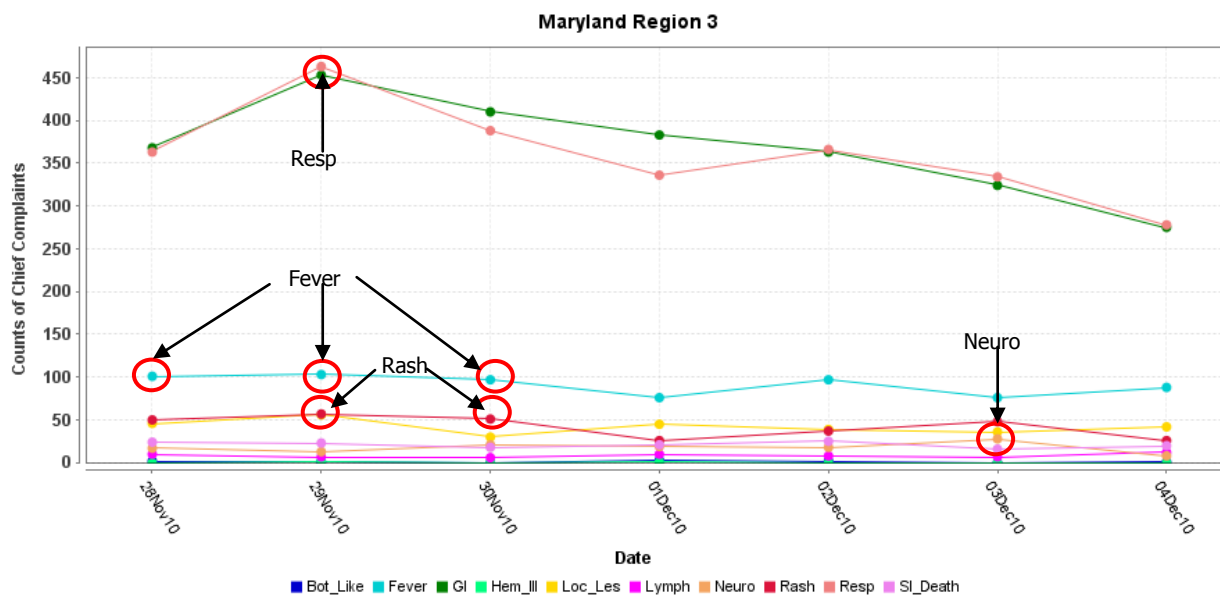


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

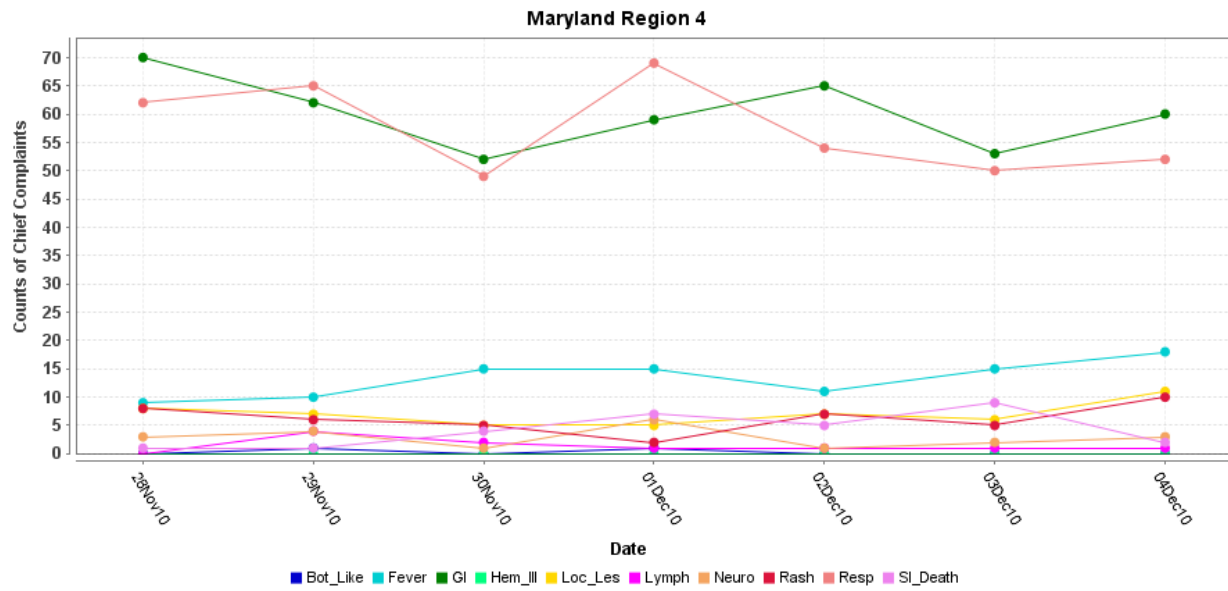
MARYLAND ESSENCE:



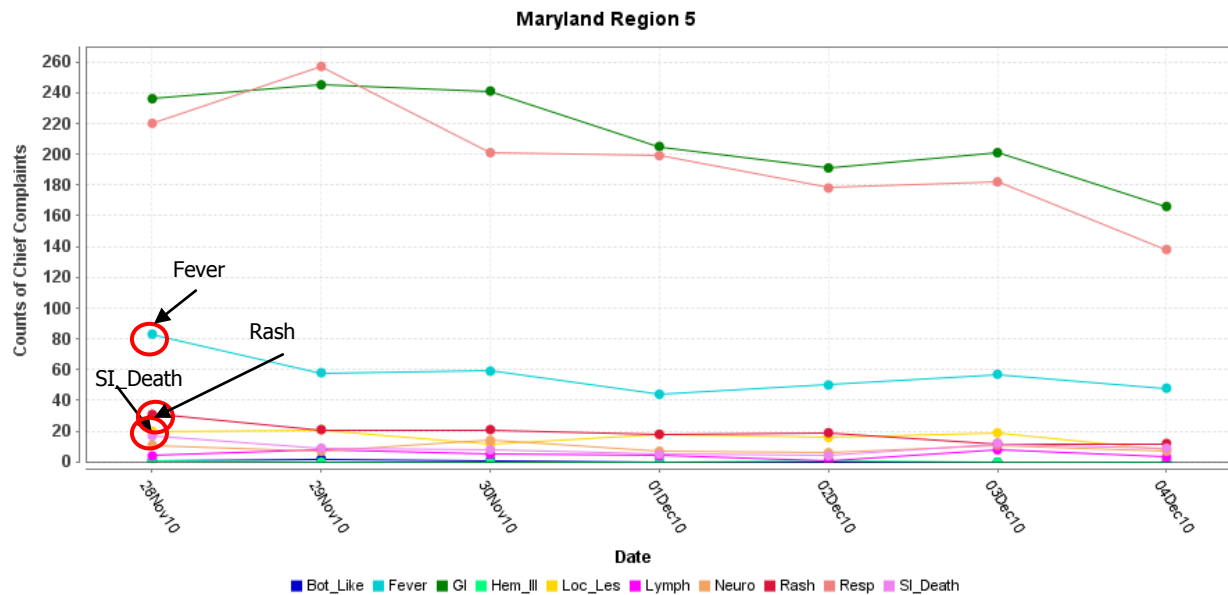
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

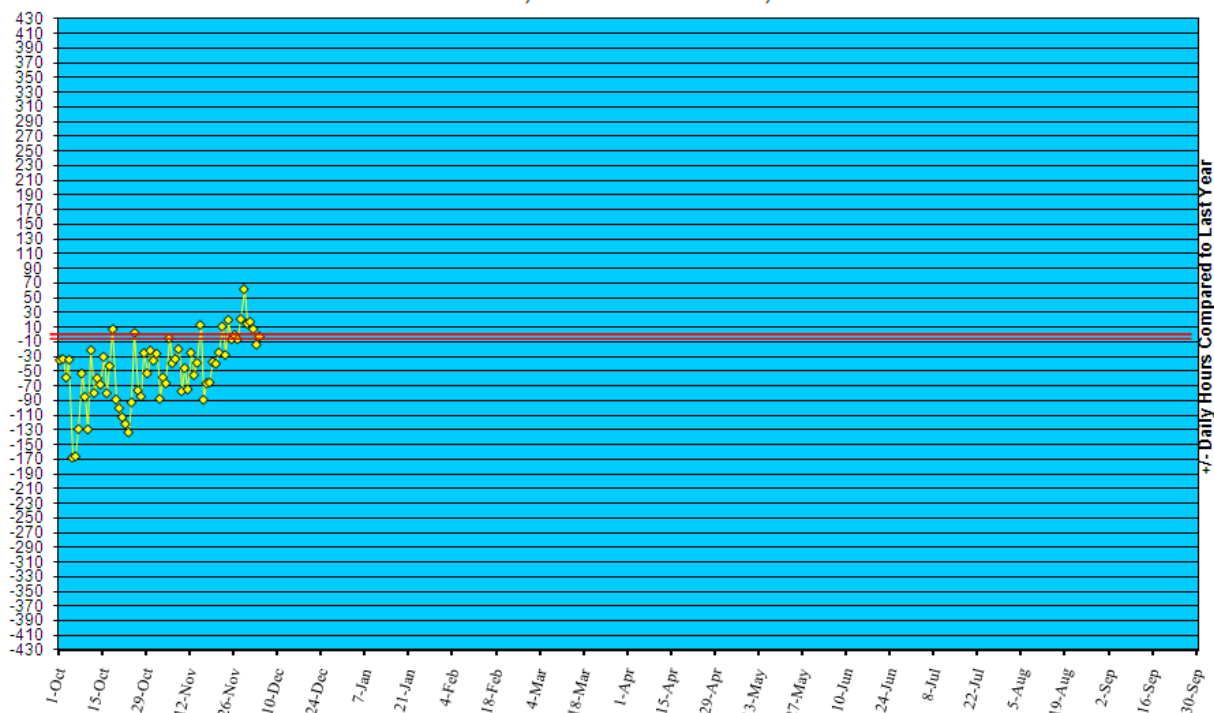


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '10 to December 4, '10



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (November 28 – December 04):	16	0
Prior week (November 21 – November 27):	05	0
Week#48, 2009 (November 29 – December 05, 2009):	18	0

Four outbreaks were reported to DHMH during MMWR Week 48 (November 28 – December 4, 2010):

3 Gastroenteritis outbreaks

- 1 outbreak of GASTROENTERITIS in a Nursing Home
- 1 outbreak of GASTROENTERITIS in a Hospital
- 1 outbreak of GASTROENTERITIS in an Assisted Living Facility

1 Respiratory illness outbreak

- 1 outbreak of PNEUMONIA in a Nursing Home

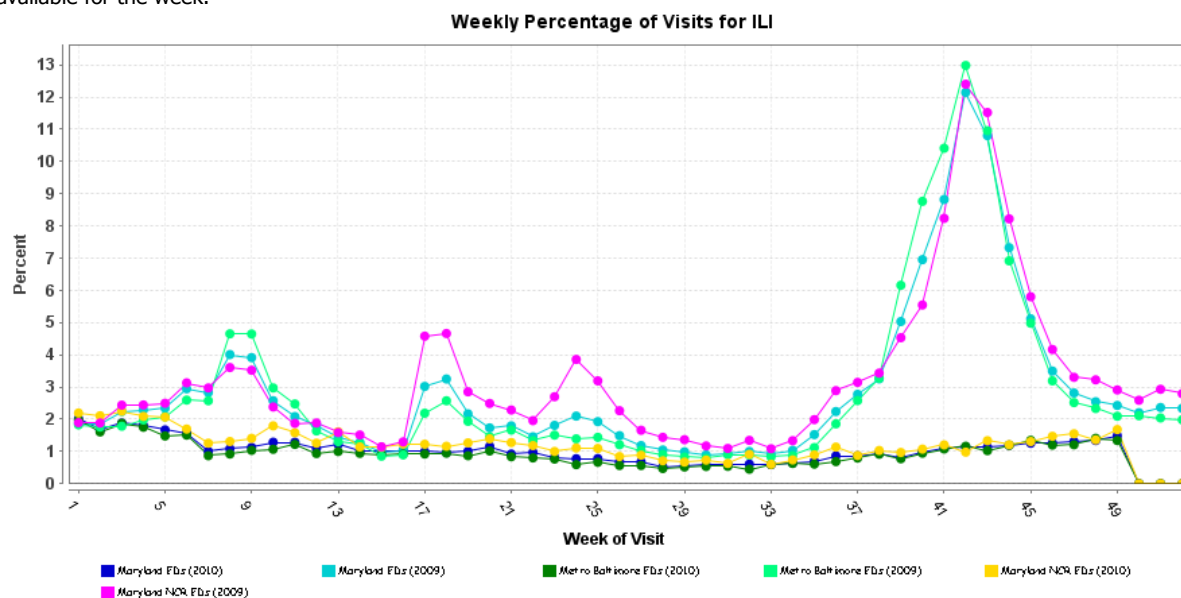
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity was sporadic with minimal intensity for Week 48.

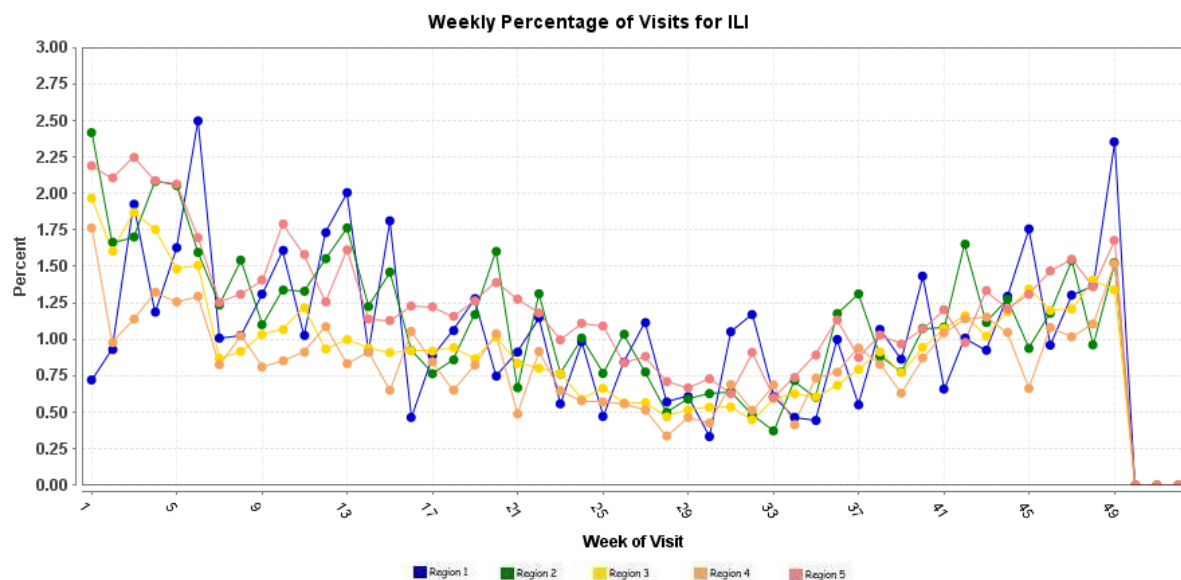
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



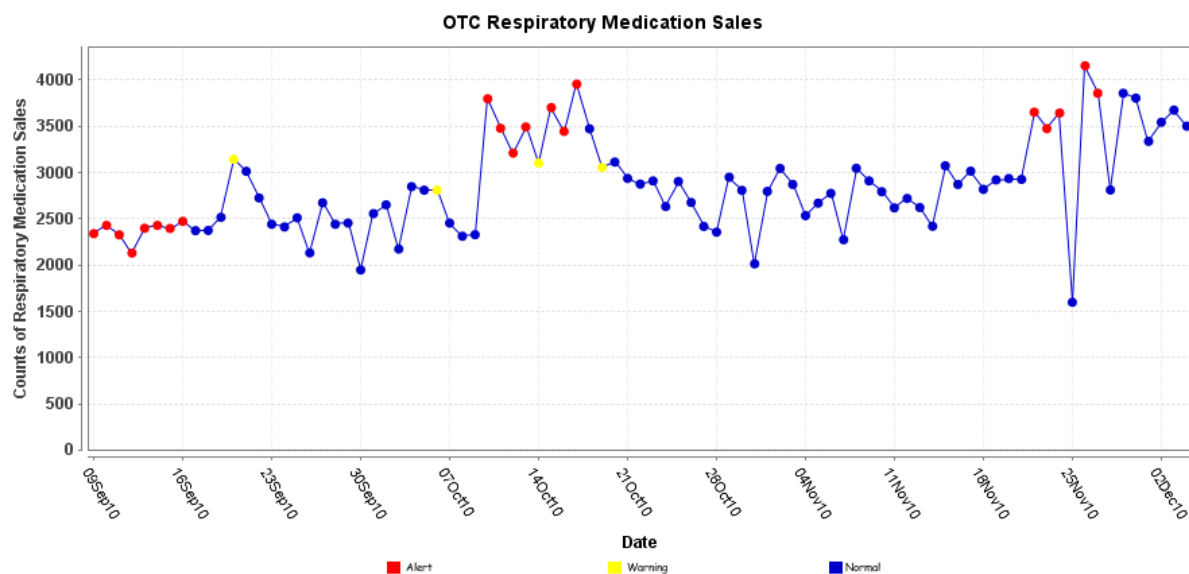
* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of November 19, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 508, of which 302 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

AVIAN INFLUENZA, SUSPECTED (JAPAN): 30 November 2010, Japan will cull about 20,000 chickens at a farm in the western prefecture of Shimane after the country's 1st case of avian influenza since 2009 was discovered by the government today [30 Nov 2010]. The government has asked the farm operator, which also raises about 3,300 chicks, not to move the birds out of the area to contain the disease, Yuji Kawakami at Shimane Prefecture's livestock office said today by phone. The owner of the egg-laying chicken farm in Yasugi city found 5 dead birds yesterday [29 Nov 2010], he said. The government has asked farms within a radius of 10 km [6.2 mi] from the Yasugi farm not to move birds, according to the Ministry of Agriculture, Forestry and Fisheries. "Preventing the spread of bird flu is important from the standpoint of crisis management," chief cabinet secretary Yoshito Sengoku told reporters in Tokyo today [30 Nov 2010]. Japan raised a total of 178 million egg-laying chickens and 107 million broilers as of 1 Feb 2009, the latest data from the ministry show. A broiler is a commercial-grade young chicken typically 7 weeks old at the time it is killed, the most common type of chicken available in supermarkets.

AVIAN INFLUENZA (VIETNAM): 29 November 2010, Bird flu H5N1 virus was discovered in the northern provinces of Nghe An and Ha Tinh that were affected by floods this month [November 2010], said health officials on Friday [26 Nov 2010]. In Nghe An Province, Dien Chau District, nearly 600 poultry infected [by] H5N1 virus, were burnt. Province health officials sterilized breeding facilities and isolated [infected] areas. In Ha Tinh Province, the bird flu outbreak has hit Cam Xuyen District. Currently, because of high demand for chicken, farmers have expanded [the] capacity of their farms. Cold weather and density of poultry farms have caused the disease to spread widely, said health officials.

NATIONAL DISEASE REPORTS

BRUCELLOSIS, BOVINE (USA): 02 December 2010, Wyoming State livestock officials are investigating a 2nd confirmed case of brucellosis in Park County and a possible new case in Sublette County. Wyoming assistant state veterinarian Bob Meyer said Wednesday [1 Dec 2010] the new case in Park County involves a herd of 1,400 bison. The state is working with the owner to test the entire herd. 3 surrounding cattle herds also are being tested, even though the bison are fenced in, Meyer said. It's suspected that elk may have been the source of the disease in the bison, he said. "We want to make sure that any of the surrounding herds right around there didn't get the same exposures to the elk because the elk can jump over fences both ways," Meyer said. The new case is not related to an earlier case discovered in late October [2010] in a separate cattle herd in Park County, located in northwest Wyoming. The state tested thousands of cattle in 12 herds in the 1st case and found no additional infections. However, preliminary tests indicate possible brucellosis in one cow that was being put up for sale in Sublette County, which is in west central Wyoming, Meyer said. More tests are being done to confirm the initial findings and more will be known sometime next week [week of 6 Dec 2010], he said. The herd in question numbers about 650 head and there are 4 or 5 other cattle herds nearby, Meyer said. The disease can cause spontaneous abortions, infertility, and weight loss in cattle, elk, bison, and other mammals. It persists in herds of wild elk and bison around Yellowstone National Park and has periodically passed to cattle in Montana, Idaho, and Wyoming. Until recently, if the disease was found in multiple cattle herds it meant costly restrictions on marketing of all Wyoming cattle to prevent brucellosis from spreading to other states. However, the US Department of Agriculture has eased its stance recently on imposing statewide restrictions and has assured the state that it will retain its status as being considered free of brucellosis, Meyer said. "As long as we're doing a good investigation to make sure that we haven't got spread into any other herds - testing neighboring herds, testing in the area, and doing a good investigation -- they said your status will stay intact, meaning we won't have a downgrade in status from USDA," he said. (Brucellosis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

JAPANESE ENCEPHALITIS (INDIA): 04 December 2010, In Eastern Uttar Pradesh, 2 [more] people succumbed to encephalitis here, taking the toll in the viral infection this year to 516. Health officials said today that the 2 died at the Baba Raghav Das Medical College Hospital here yesterday [3 Dec 2010]. The victims hailed from Gorakhpur and Sant Kabrinagar. Yesterday, 9 patients suffering from encephalitis were admitted to the hospital, Additional Director (Health) U K Srivastava said. As many as 103 patients are presently undergoing treatment at various government hospitals in the region, he said. The vaccination drive to contain Japanese encephalitis [JE virus infection] is on in 24 development blocks of Gorakhpur, Deoria, Kushinagar, Mahrajganj, Basti, Siddharthanagar and Sant Kabir Nagar, Srivastava said. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (HAITI): 30 November 2010, The number of deaths from the cholera epidemic afflicting Haiti since mid-October 2010 has risen to 1721, health officials said Mon 29 Nov 2010. In all, 75,888 people have been treated for the disease, of whom 33,485 were hospitalized, though 32,283 of them recovered and were sent home. Cholera has killed 760 people in the northern province of Artibonite, the hardest hit by the scourge. Following that province is Nord, with 290 deaths; Ouest with 285 including 162 in the Haitian capital; Plateau Central with 177; and Nord-Ouest province with 164 fatalities. Only one of Haiti's 10 provinces, Nippes, has not had a single cholera death. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmh.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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